

Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

1. Canceled

2 (previously presented). The computerized system of claim 122 wherein said at least one portable computer is a hand-held computer.

3. (Previously presented) The computerized system of claim 122 wherein said site specific computer implemented model provides a three-dimensional representation of said physical environment.

4. (Previously presented) The computerized system of claim 122 wherein said physical environment is a building and said site specific computer implemented model includes a two or three dimensional representation of at least one floor plan of said building.

5. (Previously presented) The computerized system of claim 4 wherein said site specific computer implemented model includes two or three dimensional representations of a plurality of floor plans for a plurality of floors in said building.

6. (Previously presented) The computerized system of claim 122 wherein said physical environment is a campus of buildings and said representation provided by said site specific computer generated model includes at least one floor plan for each of a plurality of buildings in said campus, and wherein said at least one portable computer can be used to select a building within said campus of buildings.

7. (Previously presented) The computerized system of claim 6 wherein said representation provided by said site specific computer implemented model includes a plurality of floor plans for a plurality of floors for a building of said

campus of buildings.

8. (Currently amended) The computerized system of claim 122 wherein said components are selected from the group consisting of one or more of base stations, base station controllers, amplifiers, attenuators, antennas, coaxial cabling, fiber optic cabling, connectors, splitters, repeaters, transducers, converters, couplers, leaky feeder cables, hubs, switches, routers, firewalls, power distribution lines, copper wiring, twisted pair cabling, and or wireless access points.

9. (Previously presented) The computerized system of claim 122 wherein said communications network includes wireless communication devices.

10. (Previously presented) The computerized system of claim 122 wherein said physical environment is an outdoor environment.

11. (Previously presented) The computerized system of claim 122 further comprising a position-tracking device used to determine a position of said at least one portable computer or said measurement device within said physical environment.

12 (Previously presented). The computerized system of claim 122 wherein said communication network components are maintained in a bill of materials.

13. (Previously presented) The computerized system of claim 122 further comprising a display associated with said at least one portable computer or said server computer or computers.

14. (Previously presented) The computerized system of claim 122
wherein said server computer or computers or said at least one portable computer can be used to input changes to said factors used in said site specific computer implemented model.

15. (Previously presented) The computerized system of claim 14 wherein said

changes that are input with said server computer or computers or said at least one portable computer modify a representation of a configuration of said communications network.

16-27. (Canceled)

28. (Currently amended) A computerized system for designing, deploying, optimizing, modifying, or maintaining a communications network, comprising:

a computerized model representing a physical environment in which said communications network is or will be deployed, said computerized model providing at least one site specific representation of locations of one or more components within said physical environment;

a server computer or computers for running a computer program which uses said computerized model;

at least one portable computer which acts as a client to said server computer or computers, said at least one portable computer being able to download, upload or store at least a portion of said at least one site specific representation to or from said server computer or computers; ~~and~~

at least one measurement device for measuring performance measurements within said physical environment, said at least one measurement device being associated with said at least one portable computer,

wherein performance measurements made with said measurement device are communicated to said server computer or computers and can be correlated with location information where said performance measurements are made; and

a display for displaying predicted or simulated data or measurement data, and wherein said display represents markers or statistics on a building drawing or floor plan which indicate differences between predicted or simulated data and actual measurement data.

29. (Previously presented) The computerized system of claim 28 wherein said measurement device is positioned inside or is part of said at least one portable computer.

30. (Currently amended) The computerized system of claim 28 wherein said measurement device is connected to said at least one portable computer.

31. (Previously presented) The computerized system of claim 28 wherein said at least one portable computer can download or upload performance measurements, predictions, or equipment modifications to or from said server computer or computers.

32. (Previously presented) The computerized system of claim 28 wherein said at least one portable computer can download or upload performance measurements, predictions or equipment modifications to or from another computer which is different from said server computer or computers.

33. (Previously presented) The computerized system of claim 28 wherein said at least one portable computer has a display.

34. (Previously presented) The computerized system of claim 28 wherein said server computer or computers or said at least one portable computer can be used to input changes to at least a portion of said at least one site specific representation.

35. (Previously presented) The computerized system of claim 28 further comprising:

a means for updating predicted performance parameters for a communications network.

36. (Original) The computerized system of claim 28 wherein said communications network includes wireless communication devices.

37. (Previously presented) The computerized system of claim 28 wherein said at least one portable computer is a hand-held computer.

38. (Previously presented) The computerized system of claim 28 wherein said at least one site specific representation is three dimensional.

39. (Previously presented) The computerized system of claim 38 wherein said at least one site specific representation is constructed from a series of two dimensional representations.

40. (Previously presented) The computerized system of claim 28 wherein said physical environment is a building and said at least one site specific representation includes at least one floor plan of said building.

41. (Previously presented) The computerized system of claim 40 wherein said at least one site specific representation includes a plurality of floor plans for a plurality of floors in said building, and wherein said at least one portable computer can be used for selecting specific floor plans of said plurality of floors for displaying on a display.

42. (Previously presented) The computerized system of claim 28 wherein said physical environment is a campus of buildings and said at least one site specific representation includes at least one floor plan for one or more buildings of said campus, and wherein said at least one portable computer can be used for selecting a building within said campus of buildings and display, on a display associated with either or both said at least one portable computer or said server computer or computers, said at least one floor plan for said building selected.

43. (Previously presented) The computerized system of claim 40 wherein said at least one site specific representation includes a plurality of floor plans for a plurality of floors for said building.

44. (Currently amended) The computerized system of claim 28 wherein components are selected from the group consisting of one or more of base stations, base station controllers, amplifiers, attenuators, antennas, coaxial cabling, fiber optic cabling, connectors, splitters, repeaters, transducers, converters, couplers, leaky feeder cables, hubs, switches, routers, firewalls, power distribution lines, copper wiring, twisted pair cabling, ~~and~~ or wireless access points.

45. (Previously presented) The computerized system of claim 28 wherein said computerized model represents an outdoor environment in two dimensions or three dimensions.

46. (Original) The computerized system of claim 28 further comprising a position-tracking device used to determine position within said physical environment.

47. (Original) The computerized system of claim 28 wherein said communication network components are maintained in a bill of materials.

48. (Previously presented) The computerized system of claim 28 wherein said at least one measurement device operates in an un-manned fashion.

49. (Previously presented) The computerized system of claim 28 further comprising at least one display at either said server computer or computers or said at least one portable computer.

50. (Previously presented) The computerized system of claim 34 wherein said changes that are input with said server computer or computers or said at least one portable computer modify a representation of a configuration of said communications network.

51. (Currently amended). A computerized system for designing, deploying, optimizing, modifying or maintaining a communications network, comprising:

a computer generated model representing a physical environment in which said communications network is or will be deployed, said computer generated model either or both

(A) providing a three-dimensional representation of locations of components within said physical environment, or

(B) providing a representation of locations of components within said physical environment which is either two dimensional or three dimensional, and wherein said computer generated model is used for performance prediction of said

communications network based on one or more factors selected from the group consisting of choice of components to be used within said physical environment, choice of parameters of said components, choice of locations for said components within said physical environment, and orientation of said components at said locations;

a server computer or computers for running a computer program which uses said computer generated model;

at least one portable computer which acts as a client to said server, said at least one portable computer can download, upload or store data representing at least a portion of said computer generated model; ~~and~~

at least one measurement device associated with said at least one portable computer for measuring performance measurements or metrics within said physical environment, wherein either or both said at least one measurement device or said at least one portable computer communicates said performance measurements or metrics to said server computer or computers and

a display for displaying predicted or simulated data or measurement data, and wherein said display presents markers or statistics on a building drawing or floor plan which indicate differences between predicted or simulated data and actual measurement data.

52. (Previously presented) The computerized system of claim 51 further comprising a display associated with said server computer or computers or said at least one portable computer.

53. (Currently amended) The computerized system of claim 51 wherein said measurement device is connected to, contained within, or interfaceable with said at least one portable computer.

54. (Previously presented) The computerized system of claim 51 wherein said server computer or computers or said at least one portable computer can upload or download one or more of said performance measurements or metrics, predictions of performance for a communications network which is or will be installed in said physical environment, or said data representing said at least a portion of said

computer generated model to or from said at least one portable computer, said server computer or computers, or another computer.

55. (Previously presented) The computerized system of claim 51 wherein updating, modifying, logging, storing or archiving can be performed at said server computer or computers.

56. (Previously presented) The computerized system of claim 51 wherein said server computer or computers or said at least one portable computer can be used to input changes to data representing at least a portion of said computer generated model.

57. (Previously presented) The computerized system of claim 51 wherein said server computer or computers or said at least one portable computer can communicate either or both predicted or measured performance measurements or metrics.

58. (Previously presented) The computerized system of claim 51 wherein said at least one portable computer comprises an input device for inputting changes to at least a portion of said data representing said computer generated model.

59. (Previously presented) The computerized system of claim 58 further comprising an editor for making said changes.

60. (Currently amended) The computerized system of claim 51 wherein said at least one portable computer performs or controls at least one of a) performance predictions, b) ~~autonomous~~ measurements, c) analysis of cost data of components or network infrastructure, and d) tracking network equipment changes.

61. (Previously presented) The computerized system of claim 51 wherein said at least one portable computer can upload or download changes to or from said server computer or computers or to or from another computer.

62. (Previously presented) The computerized system of claim 51 further comprising at least one of a display or storage device for displaying or storing, respectively, said changes at either said server computer or computers or said at least one portable computer or said another portable computer.

63. (Previously presented) The computerized system of claim 56 wherein efficient change tracking is employed.

64. (Previously presented) The computerized system of claim 51 wherein communication of simulation or prediction or measurement data occurs through one of a docking cradle connection, a wireless connection, a wired connection, or via electronic media.

65. (Previously presented) The computerized system of claim 51 wherein said at least one portable computer includes a plurality of portable computers, and wherein either or both predicted or measured performance measurements or metrics may be communicated between said server computer or computers and said plurality of portable computers.

66. (Previously presented) The computerized system of claim 51 wherein said at least one portable computer provides data to said server computer or computers, and said server computer or computers processes provided data to provide a modified result.

67. (Previously presented) The computerized system of claim 66 where said modified result is communicated to said at least one portable computer.

68. (Previously presented) The computerized system of claim 51 wherein said components include at least one communication network component, and wherein a cost of a communication network component of said at least one communication network component may be tracked, shared, revised, or substituted.

69. (Previously presented) The computerized system of claim 51 wherein said

components include at least one communication network component, and wherein a performance attribute of a communication network component of said at least one communication network component may be tracked, shared, revised or substituted.

70. (Previously presented) The computerized system of claim 51 wherein a maintenance record in either or both said server computer or computers or said at least one portable computer may be tracked, shared, revised or substituted.

71. (Previously presented) The computerized system of claim 51 wherein said components include at least one communication network component, and wherein a location or orientation of a communication network component of said at least one communication network component may be tracked, shared, revised or substituted.

72. (Previously presented) The computerized system of claim 51 wherein said three dimensional representation is represented as one or more two dimensional representations.

73. (Previously presented) The computerized system of claim 51 wherein said computer generated model provides a two dimensional or three dimensional representation based upon at least one floor plan of a building.

74. (Previously presented) The computerized system of claim 73 wherein said computer generated model provides two dimensional or three dimensional representations based upon a plurality of floor plans for one or more floors for one or more buildings.

75. (Previously presented) The computerized system of claim 74 wherein said server computer or computers or said at least one portable computer can be used to select one or more floor plans or one or more buildings for display, measurement or prediction operations.

76. (Currently amended) The computerized system of claim 51 wherein components represented in said computer generated model are selected from the group consisting of one or more of base stations, base station controllers, amplifiers, attenuators, antennas, coaxial cabling, fiber optic cabling, splitters, repeaters, transducers, converters, couplers, leaky feeder cables, hubs, switches, routers, firewalls, power distribution lines, copper wiring, twisted pair cabling and or wireless access points.

77. (Previously presented) The computerized system of claim 51 wherein said communications network includes wireless communication devices.

78. (Previously presented) The computerized system of claim 51 wherein said computer generated model represents an outdoor environment in two dimensions or three dimensions.

79. (Currently amended) The computerized system of claim 51 further comprising a means position location system or device for identifying a location of said at least one portable computer within said physical environment.

80. (Previously presented) The computerized system of claim 51 further comprising a position-tracking or locationing device for locating said at least one portable computer or measurement device.

81. (Previously presented) The computerized system of claim 51 wherein said server computer or computers or said at least one portable computer can be used to alter a layout of components.

82. (Previously presented) The computerized system of claim 56 wherein said changes that are input with said server computer or computers or said at least one portable computer modify a representation of a configuration of said communications network.

83. (Previously presented) The computerized system of claim 51 wherein said at

least one measurement device makes performance measurements in said physical environment on an automated or un-manned basis.

84. (Currently amended) The computerized system of claim 51 wherein said computer generated model represents at least one of objects in a building or their locations, communications component data and their location, building information or properties, radio propagation properties, bill of materials data, environmental data, cost data, ~~and~~ or asset management data.

85-121. Canceled

122. (Currently amended) A computerized system for designing, deploying, optimizing, modifying or maintaining a communications network, comprising:
a site specific computer implemented model representing a physical environment in which a communications network is or may be deployed, said site specific computer implemented model providing a representation of one or more components or physical objects, said site specific computer implemented model is used for performance prediction of a communications network based on one or more factors selected from the group consisting of choice of components to be used within said physical environment, choice of parameters of said components, choice of locations for said components within said physical environment, and orientation of said components at said locations;

a server computer or computers for running a computer program which uses said site specific computer implemented model;

at least one portable computer which acts as a client to said server computer or computers, said at least one portable computer can download, upload or store a representation of at least a portion of said site specific computer implemented model from said server computer or computers;

at least one measurement device for measuring one or more performance measurements or metrics within said physical environment, said measurement device being associated with said at least one portable computer, and

wherein said at least one portable computer communicates said one or more performance measurements or metrics measured by said measurement

device to said server computer or computers; and

a display for displaying predicted or simulated data or measurement data, and wherein said display presents markers or statistics on a building drawing or floor plan which indicate differences between predicted or simulated data and actual measurement data.

123. (Currently amended) The computerized system of claim 122 wherein ~~and~~ said server computer or computers updates said site specific computer implemented model of said physical environment to include said one or more performance measurements or metrics.

124. (Previously presented) The computerized system of claim 51 wherein said display can display one or more of location information, predictions, measurements, and at least a portion of said site specific representation.

125. (Previously presented) The computerized system of claim 5 wherein said at least one portable computer can be used to select specific floors plans from said plurality of floor plans.

126. (Previously presented) The computerized system of claim 34 wherein efficient change tracking is employed.

127. (Previously presented) The computerized system of claim 28 wherein said server computer or computers or said at least one portable computer can be used to input changes to said computerized model.

128. (Previously presented) The computerized system of claim 127 wherein said changes that are input with said server computer or computers or said at least one portable computer modify a representation of a configuration of said communications network.

129. (Previously presented) The computerized system of claim 127 wherein efficient change tracking is employed.

130. (Currently amended) A computerized system for designing, deploying, optimizing, modifying or maintaining a communications network, comprising:

a computer implemented model which provides one or more representations of a physical environment in which a communications network is or may be deployed, said computer implemented model providing a representation representing locations of one or more components within said physical environment, said computer implemented model can be used for performance prediction of a communications network based on one or more factors selected from the group consisting of choice of components to be used within said physical environment, choice of parameters of said components, choice of locations for said components within said physical environment, and orientation of said components at said locations;

a server computer or computers for running a computer program which uses said computer implemented model; ~~and~~

at least one portable computer which can download, upload or store one or more representations of said computer implemented model from said server computer or computers, said at least one portable computer can be used to modify, using said one or more representations, one or more factors used in said computer implemented model, and can determine updated performance predictions based on modifications to said one or more factors, and

wherein said at least one portable computer can upload modifications or updated performance predictions to said server computer or computers; and

a position-tracking or locationing system, and a display which displays one or more comparisons of measured position-location with predicted or simulated position-location at either said server computer or computers, said at least one portable computer, or other computers.

131. (Previously presented) The computerized system of claim 130 wherein said server computer or computers update said computer implemented model to include said modifications or updated performance predictions.

132. (Previously presented) The computerized system of claim 130 further comprising at least one measurement device for measuring performance metrics in

said physical environment, said measurement device providing performance measurements or metrics to either or both said at least one portable computer or said server computer or computers.

133. (Previously presented) The computerized system of claim 132 wherein either or both said at least one measurement device or said at least one portable computer is operated without human intervention.

134. (Previously presented) The computerized system of claim 132 wherein either or both said at least one measurement device or said at least one portable computer is positioned at a fixed location, and wherein either or both said at least one measurement device or said at least one portable computer can be used to passively or autonomously report communication network performance to said server computer or computers, or one or more client computers, or one or more other computers.

135. (Previously presented) The computerized system of claim 132 further comprising a display for displaying predicted or simulated data or measurement data.

136. (Currently amended) The computerized system of claim 135 wherein said display presents markers or statistics ~~directly~~ on a building drawing or floor plan which indicate differences between predicted or simulated data and actual measurement data.

137. (Previously presented) The computerized system of claim 132 wherein performance measurements are correlated to position information.

138. (Currently amended) The computerized system of claim 132 wherein one or more site specific data are communicated between a server computer or computers and said at least one portable computer or another computer, wherein said site specific data includes one or more of network information, measured data, and predicted data, and wherein said site specific data are capable of being processed

or ~~and~~ analyzed remotely, and of being updated so as to allow new, updated, performance predictions to be communicated between said server computer or computers and said at least one portable computer or another computer.

139. (Previously presented) The computerized system of claim 130 further comprising a display for displaying simulated or predicted data as one of a) a grid of data points, b) one or more contours identifying equal performance, and c) one or more points where a simulated user is tracked within a building.

140. Canceled

141. (Currently amended) A method for designing, deploying, optimizing, modifying or maintaining a communications network, comprising the steps of:

providing a computer implemented model representing a physical environment in which a communications network is or may be deployed, said computer implemented model providing a representation of locations of one or more components within said physical environment, said computer implemented model can be used for performance prediction of a communications network based on one or more factors selected from the group consisting of choice of components to be used within said physical environment, choice of parameters of said components, choice of locations for said components within said physical environment, and orientation of said components at said locations;

communicating between a server computer or computers and at least one portable computer, either

a) performance measurements made in said physical environment with a measurement device that is associated with said at least one portable computer, or

b) updated performance predictions determined by either said server computer or computers or said at least one portable computer that are based on modifications to said one or more factors; ~~and~~

updating one or more representations of said computer implemented model to include either said performance measurements or said updated performance predictions; and

displaying predicted or simulated data or measurement data, wherein said

displaying step includes the step of presenting markers or statistics on a building drawing or floor plan which indicate differences between predicted or simulated data and actual measurement data.

142. (Previously presented) The method of claim 141 wherein either or both a measurement device used for making said performance measurements or said at least one portable computer are operated without human intervention.

143. (Previously presented) The method of claim 141 wherein either or both a measurement device used for making said performance measurements or said at least one portable computer are positioned at a fixed location, and further comprising the step of using either or both said measurement device or said at least one portable computer to passively or autonomously report communication network performance to said server computer or computers, or one or more client computers, or one or more other computers.

144-145. Canceled

146. (Previously presented) The method of claim 141 further comprising the step of correlating said performance measurements with position information.

147. (Currently amended) The method of claim 141 wherein one or more site specific data are communicated between a server computer or computers and said at least one portable computer or another computer, wherein said site specific data includes one or more of network information, measured data, and predicted data, and wherein said site specific data are capable of being processed ~~and~~ or analyzed remotely, and of being updated so as to allow new, updated, performance predictions to be communicated between said server computer or computers and said at least one portable computer or another computer.

148. (Previously presented) The method of claim 141 further comprising the step of displaying simulated or predicted data as one of a grid of data points, one or more contours identifying equal performance, and one or more points where a

simulated user is tracked within a building.

149. (Previously presented) The method of claim 141 further comprising the step of position-tracking movements of one or more users within said physical environment, and displaying said movements on a display.

150. (Previously presented) The computerized system of claim 122 wherein either or both said at least one measurement device or said at least one portable computer is operated without human intervention.

151. (Previously presented) The computerized system of claim 122 wherein either or both said at least one measurement device or said at least one portable computer is positioned at a fixed location, and wherein either or both said at least one measurement device or said at least one portable computer can be used to passively or autonomously report communication network performance to said server computer or computers, or one or more client computers, or one or more other computers.

152-153. Canceled

154. (Previously presented) The computerized system of claim 122 wherein performance measurements are correlated to position information.

155. (Currently amended) The computerized system of claim 122 wherein one or more site specific data are communicated between a server computer or computers and said at least one portable computer or another computer, wherein said site specific data includes one or more of network information, measured data, and predicted data, and wherein said site specific data are capable of being processed and or analyzed remotely, and of being updated so as to allow new, updated, performance predictions to be communicated between said server computer or computers and said at least one portable computer or another computer.

156. (Currently amended) The computerized system of claim 122 further

comprising a display for displaying simulated or predicted data as one of a) a grid of data points, b) one or more contours identifying equal performance, ~~and~~ or c) one or more points where a simulated user is tracked within a building.

157. (Previously presented) The computerized system of claim 122 further comprising a position-tracking system which allows movements of one or more users within said physical environment to be tracked and displayed.

158. (Currently amended) The computerized system of claim 122 wherein said computer implemented model represents at least one of objects in a building or their locations, communications component data and their location, building information or properties, radio propagation properties, bill of materials data, environmental data, cost data or asset management data ~~either or both said at least one measurement device or said at least one portable computer is operated without human intervention.~~

159. (Previously presented) The computerized system of claim 51 wherein either or both said at least one measurement device or said at least one portable computer is positioned at a fixed location, and wherein either or both said at least one measurement device or said at least one portable computer can be used to passively or autonomously report communication network performance to said server computer or computers, or one or more client computers, or one or more other computers.

160-161. Canceled

162. (Previously presented) The computerized system of claim 51 wherein performance measurements are correlated to position information.

163. (Currently amended) The computerized system of claim 51 wherein one or more site specific data are communicated between a server computer or computers and said at least one portable computer or another computer, wherein said site specific data includes one or more of network information, measured data, and

predicted data, and wherein said site specific data are capable of being processed or ~~and~~ analyzed remotely, and of being updated so as to allow new, updated, performance predictions to be communicated between said server computer or computers and said at least one portable computer or another computer.

164. (Currently amended) The computerized system of claim 51 further comprising a display for displaying simulated or predicted data as one of a) a grid of data points, b) one or more contours identifying equal performance, or ~~and~~ c) one or more points where a simulated user is tracked within a building.

165. (Previously presented) The computerized system of claim 51 further comprising a position-tracking system which allows movements of one or more users within said physical environment to be tracked and displayed.

166. (Previously presented) The computerized system of claim 28 wherein either or both said at least one measurement device or said at least one portable computer is operated without human intervention.

167. (Previously presented) The computerized system of claim 28 wherein either or both said at least one measurement device or said at least one portable computer is positioned at a fixed location, and wherein either or both said at least one measurement device or said at least one portable computer can be used to passively or autonomously report communication network performance to said server computer or computers, or one or more client computers, or one or more other computers.

168-169. Canceled

170. (Previously presented) The computerized system of claim 28 wherein performance measurements are correlated to position information.

171. (Currently amended) The computerized system of claim 28 wherein one or more site specific data are communicated between a server computer or computers

and said at least one portable computer or another computer, wherein said site specific data includes one or more of network information, measured data, and predicted data, and wherein said site specific data are capable of being processed ~~and~~ or analyzed remotely, and of being updated so as to allow new, updated, performance predictions to be communicated between said server computer or computers and said at least one portable computer or another computer.

172. (Currently amended) The computerized system of claim 28 further comprising a display for displaying simulated or predicted data as one of a) a grid of data points, b) one or more contours identifying equal performance, ~~and~~ or c) one or more points where a simulated user is tracked within a building.

173. (Previously presented) The computerized system of claim 28 further comprising a position-tracking or locationing system, and which displays one or more comparisons of measured position-location with predicted or simulated position-location at either said server computer or said one or more portable computers or other computers.

174. (New) A computerized system for designing, deploying, optimizing, modifying or maintaining a communications network, comprising:

- a computer implemented model which provides one or more representations of a physical environment in which a communications network is or may be deployed, said computer implemented model providing a representation representing locations of one or more components within said physical environment, said computer implemented model can be used for performance prediction of a communications network based on one or more factors selected from the group consisting of choice of components to be used within said physical environment, choice of parameters of said components, choice of locations for said components within said physical environment, and orientation of said components at said locations;

- a server computer or computers for running a computer program which uses said computer implemented model;

- at least one portable computer which can download, upload or store one or

more representations of said computer implemented model from said server computer or computers, said at least one portable computer can be used to modify, using said one or more representations, one or more factors used in said computer implemented model, and can determine updated performance predictions based on modifications to said one or more factors,

wherein said at least one portable computer can upload modifications or updated performance predictions to said server computer or computers;

at least one measurement device for measuring performance metrics in said physical environment, said measurement device providing performance measurements or metrics to either or both said at least one portable computer or said server computer or computers; and

a display for displaying predicted or simulated data or measurement data, wherein said display presents markers or statistics on a building drawing or floor plan which indicate differences between predicted or simulated data and actual measurement data.

175. (New) The computerized system of claim 174 wherein said server computer or computers update said computer implemented model to include said modifications or updated performance predictions.

176. (New) The computerized system of claim 174 wherein either or both said at least one measurement device or said at least one portable computer is operated without human intervention.

177. (New) The computerized system of claim 174 wherein either or both said at least one measurement device or said at least one portable computer is positioned at a fixed location, and wherein either or both said at least one measurement device or said at least one portable computer can be used to passively or autonomously report communication network performance to said server computer or computers, or one or more client computers, or one or more other computers.

178 (New). The computerized system of claim 174 wherein performance

measurements are correlated to position information.

179 (New). The computerized system of claim 174 wherein one or more site specific data are communicated between a server computer or computers and said at least one portable computer or another computer, wherein said site specific data includes one or more of network information, measured data, and predicted data, and wherein said site specific data are capable of being processed ~~and~~ or analyzed remotely, and of being updated so as to allow new, updated, performance predictions to be communicated between said server computer or computers and said at least one portable computer or another computer.

180 (New). The computerized system of claim 174 wherein said display displays simulated or predicted data as one of a) a grid of data points, b) one or more contours identifying equal performance, or c) one or more points where a simulated user is tracked within a building.

181 (New). The computerized system of claim 174 further comprising a position-tracking or locationing system, and which displays one or more comparisons of measured position-location with predicted or simulated position-location at either said server computer or computers, or said one or more portable computers, or other computers.